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February 1, 1983

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Dresden Station Unit 2
Proposed Technical Specification
Change Concerning Safety/Relief
NRC Docket No. 50-237

References (a): T. J. Rausch letter to H. R. Denton dated October 18, 1982.

(b): T. J. Rausch letter to H. R. Denton dated December 21, 1982.

Dear Mr. Denton:

Pursuant to 10 CFR 50.59, Commonwealth Edison proposes to amend the Appendix A Technical Specifications to Provisional Operating License DPR-19 for Dresden Station Unit 2. The requested amendment changes the safety/relief actuating setpoint of the Target Rock valve to 1124 psig nominal (1135 psig maximum) and changes the setpoint of two Electromatic Relief (EMR) valves to 1101 psig nominal (1112 psig maximum). These changes are very similar to those proposed in Reference (a) for Quad Cities Station Unit 1 (approved in Amendment 83 to DPR-29 on December 15, 1982).

In analyses associated with the Mark I Containment Program, it was discovered that excessive loads could be subjected to the torus if a relief valve actuation occurs shortly after it closes. This loading is the result of a water leg entrapped in the relief valve discharge line from the vacuum caused by the condensed steam in this line. To prevent such loading, a modification to the EMR valve logic is currently being installed which will delay automatic opening of the two lowest set EMR valves up to ten seconds from the last closure of the valve. In order to maintain very similar overall Target Rock and EMR valve performance with this logic change and prevent excessive loading, the two affected (EMR) valves Technical Specification pressure setpoints must be lowered and the setpoint of one valve (Target Rock) will be raised.

A025
R+D w/cost change

ADD: NRR/DL/DIR
NRR/DSI/RAB
NRR/DSI/METB

The setting of 1135 psig for the higher set valve group was chosen to maintain conformance to the maximum opening set point limit of the existing Technical Specifications (DRP-19). Included in this group is the Target Rock valve, whose safety valve characteristics makes its inclusion mandatory. Originally, the revised opening set-points for the lower set valves were 1115 psig each, based on a setpoint drift of ± 9 psi and to ensure there is no overlap between the upper limit of the low set group and the lower limit of the high set group. We subsequently changed to a low opening set point of 1112 to accommodate an allowable setpoint error of ± 1% in our Technical Specifications. Note that the new setpoints proposed are nominal, which are equivalent to maximum setpoints less 1%.

In summary, the setpoint arrangement (psig) will be as follows: (Safety setting of Target Rock (203-3A) is 1135 ± 1%)

Electromatic Controller Setting (Relief Setting)

	A	B	C	D	E
Tech Spec Max Setpoint	1135	1112	1112	1135	1135
Nominal Set	1124	1101	1101	1124	1124
Prev. Tech Spec Setpoint	1115	≤1130	≤1130	≤1135	≤1135

The plant transients and the ASME overpressurization event were explicitly analyzed by Exxon for Dresden 2 Cycle 9 using revised setpoints as proposed in this request except for the two low set valves B and C. Valves B and C were assumed by Exxon to have maximum setpoints of 1115 psig instead of 1112 psig because the Exxon analyses were performed prior to the decision to decrease these setpoints an addition 3 psi. This 3 psi reduction has been evaluated by Exxon, and they have determined that the reduction would only add conservatism to the thermal margin analysis by slightly decreasing peak transient pressures. The results of the Dresden 2 Cycle 9 transient analyses are reported in XN-NF-82-84, which was provided in Reference (b).

Concerning ECCS analyses, these changes will have no impact on the PCT for the limiting break (i.e. large break LOCA). The impact on the worst case small break LOCA is expected to be less than ±20°F. This increase is not significant, and cannot make the SBLOCA more limiting than the LBLOCA. Also, the ten second delay is not expected to have any impact on peak pressure as the steam generation is much reduced after the scram.

Although the net effect on transients and accidents is insignificant for the reasons described above, future cycle specific reload analyses will explicitly account for the actual setpoints in place. Because these changes do not affect the design basis LOCA (large break), no explicit ECCS reanalyses are necessary.

The attached changes have received On-Site and Off-Site review and approval. Installation of this modification is required in the current Unit 2 outage by the Mark I orders; your approval of this request is therefore necessary prior to startup (late March, 1983 is the current schedule).

We have determined that this request is a Class III 10 CFR 170 amendment request. As such, a fee remittance of $4,000 is enclosed.

Please direct any questions you may have concerning this matter to this office.

Three (3) signed originals and forty (40) copies of this transmittal are provided for your use.

Very truly yours,

Thomas J. Rausch

Thomas J. Rausch
Nuclear Licensing Administrator

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Attachment

cc: Region III Inspector - Dresden
R. Gilbert - NRR

SUBSCRIBED and SWORN to
before me this 1st day
of February, 1983

Notary Public

5898N